

## Biofuels and Biobased Products

NOTE: The Solicitations and topics listed on this site are copies from the various SBIR agency solicitations and are not necessarily the latest and most up-to-date. For this reason, you should use the agency link listed below which will take you directly to the appropriate agency server where you can read the official version of this solicitation and download the appropriate forms and rules.

The official link for this solicitation is: [http://www.nifa.usda.gov/funding/rfas/sbir\\_rfa.html](http://www.nifa.usda.gov/funding/rfas/sbir_rfa.html)

Agency:  
Department of Agriculture

Release Date:  
July 13, 2011  
Branch:  
n/a

Open Date:  
July 13, 2011  
Program / Phase / Year:  
SBIR / Phase I / 2012

Application Due Date:  
September 01, 2011

Solicitation:  
[1](#)

Close Date:  
September 01, 2011  
Topic Number:  
8.8

### Description:

The objective of this topic area is to promote the use of biofuels and non-food biobased products by developing new or improved technologies that will lead to increased production of industrial products from agricultural materials. This research will lead to new opportunities to diversify agriculture and enhance agriculture's role as a reliable supplier of raw materials to industry. This topic area supports the NIFA Sustainable Bioenergy Societal Challenge Area and the Climate Change Societal Challenge Area. Historically, appropriate research areas have included: development of procedures for enhanced recovery of critical raw materials from agricultural commodities; development of improved technology for converting agriculturally derived raw materials into useful industrial products; development of new products from new industrial crops; and development of industrial products derived from agricultural materials to make them more effective and/or more cost competitive with non-agriculturally derived industrial products. In order to enhance the impact of the program, acceptance of applications will be limited to selected Research Priority Areas.

### FY2012 Priority Research Areas

Acceptance of applications for the FY2012 solicitation will be **strictly limited** to:

1. **Advanced "Drop-in" Biofuels**– New and improved technology for the **economically and environmentally sustainable** production and conversion of agricultural biomass material **energy crops and residues** into non-ethanol biofuels (e. g. biobutanol, green gasoline, green diesel,

aviation fuel), fuel additives, and other products to be used as fuel; development of improved biocatalysts and thermochemical processes for advanced biofuel production, and byproducts from the advanced biofuel production stream that will optimize the economic feasibility of the production of biofuels. This solicitation seeks to support innovative technologies that will minimize adverse environmental impacts during conversion (for example: reduction of energy use and water use during conversion; reduction of harmful byproducts from conversion) and have carbon reduction benefits. Applications developing technology for ethanol production (grain or cellulosic) or co-products from ethanol production will not be accepted in this topic area, but may be submitted to other topic areas if appropriate (see Other Key Information below). Applications not addressing economic and environmental sustainability may be returned to the applicant without review.

2. Advanced biofuels and biobased products from **animal manure** or carcass waste.
3. **New Non-food Biobased Products from New Industrial Crops**– Identification of markets and development of new biobased products and processes for making products from new industrial crops (including algae). These products should be economically competitive and have carbon reduction benefits.
4. New processes for the manufacture of **biobased plastics**.
5. New products or processes that develop **biobased materials** with properties **that enhance energy efficiency** in their applications.

### Other Key Information

- **ALL ATTACHMENTS MUST BE SUBMITTED IN THE PORTABLE DOCUMENT FORMAT (PDF).**
- All Phase I applications should give the reviewing community a brief vision of where the PD expects the project to be at the end of Phase II (entering Phase III commercialization).
- Applications that deal with developing value-added biofuels (including ethanol) and biobased products from forest biomass should be sent to the 8.1 Forest and Related Resources topic area.
- Applications that deal with developing biofuels (including ethanol) and bioenergy that will improve the sustainability of small and mid-size farms should be sent to the 8.12 Small and Mid-Size Farms topic area.
- Applications that deal with the genetic improvement or production of biomass feedstock crops except for woody biomass and algae should be submitted to the 8.2 Plant Production and Protection – Biology topic area.
- Applications that deal with the genetic improvement, production, or feedstock logistics of woody biomass feedstock crops should be submitted to the 8.1 Forest and Related Resources topic area.
- Applications that deal with the genetic improvement, production, or feedstock logistics of algae for biofuel production should be submitted to the 8.7 Aquaculture topic area.
- Applications that deal with the engineering aspects of the planting, production or post-harvest handling of biomass feedstock crops should be submitted to the 8.13 Plant Production and Protection – Engineering topic area.
- Applications submitted to this topic area that do not specifically address the FY2012 Priority Research Areas will not be reviewed.
- Applications exceeding the budget limitation or exceeding the page limit or not meeting the formatting requirements will be excluded from NIFA review.